Docket No. 396.45117X00 Serial No. 10/537,437 April 19, 2007

## **Amendments to the Claims:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application:

## **Listing of Claims:**

1. (Currently amended) A method of fluorination which comprises fluorinating a saccharide monosaccharide or monosaccharide bonded to a base of a nucleic acid using a fluorinating agent represented by general formula (I):

$$R^0 - C - Y < R^1$$
 $R^2$ 
(1)

wherein Y represents nitrogen atom or phosphorus atom,  $R^0$ ,  $R^1$  and  $R^2$  represent hydrogen atom or an alkyl or aryl group which may have substituents, the atom and the groups represented by  $R^0$ ,  $R^1$  and  $R^2$  may be a same with or different from each other, and two or three of the groups represented by  $R^0$ ,  $R^1$  and  $R^2$  may be bonded to each other to form a ring.

- 2. (Original) A method of fluorination according to Claim 1, wherein, in general formula (I), Y represents nitrogen atom,  $R^0$  represents 3-methyphenyl group or 2-methoxyphenyl group, and  $R^1$  and  $R^2$  represent ethyl group.
- 3. (Currently amended) A method of fluorination according to Claim 1, wherein the saccharide monosaccharide or monosaccharide bonded to a base of a nucleic acid is fluorinated by a thermal reaction.

Docket No. 396.45117X00 Serial No. 10/537,437 April 19, 2007

- 4. (Currently Amended) A method of fluorination which comprises fluorinating a substrate monosaccharide or monosaccharide bonded to a base of a nucleic acid by bringing the substrate monosaccharide or monosaccharide bonded to a base of a nucleic acid and a fluorinating agent represented by the general formula (I) into reaction with each other under irradiation with at least one of microwave and electromagnetic wave having a wavelength around a microwave region.
- 5. (Currently Amended) A method of fluorination according to Claim 4, wherein the substrate monosaccharide or monosaccharide bonded to a base of a nucleic acid is fluorinated by bringing the substrate monosaccharide or monosaccharide bonded to a base of a nucleic acid and the fluorinating agent represented by general formula (I):

$$R^0 - C - Y < R^1$$
 $R^2$ 
(I)

wherein Y represents nitrogen atom or phosphorus atom, R<sup>0</sup>, R<sup>1</sup> and R<sup>2</sup> represent hydrogen atom or an alkyl or aryl group which may have substituents, the atom and the groups represented by R<sup>0</sup>, R<sup>1</sup> and R<sup>2</sup> may be a same with or different from each other, and two or three of the groups represented by R<sup>0</sup>, R<sup>1</sup> and R<sup>2</sup> may be bonded to each other to form a ring into reaction with each other under irradiation with microwave having a frequency of 1 to 30 GHz.

6. (Previously Presented) A method of fluorination according to Claim 4, wherein the fluorinating agent is a compound represented by general formula (II):

$$R^0 - C - Y < R^1$$
(II)

wherein Y represents nitrogen atom or phosphorus atom, X represents hydrogen atom or a halogen atom,  $R^0$ ,  $R^1$  and  $R^2$  represent hydrogen atom or an alkyl or aryl group which may have substituents, the atom and the groups represented by  $R^0$ ,  $R^1$  and  $R^2$  may be a same with or different from each other, and two or three of the groups represented by  $R^0$ ,  $R^1$  and  $R^2$  may be bonded to each other to form a ring.

7. (Original) A method of fluorination according to Claim 6, wherein the fluorinating agent is a compound represented by general formula (III):

$$R^3 - C - N < R^4$$
(III)

wherein R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> each independently represent an alkyl or aryl group which may have substituents, X represents hydrogen atom or a halogen atom, and two or three of the groups represented by R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> may be bonded to each other to form a cyclic structure.

8. (Original) A method of fluorination according to Claim 7, wherein, in general formula (III), R<sup>3</sup> represents an aryl group which may have substituents, X represents fluorine atom, and R<sup>4</sup> and R<sup>5</sup> represent an alkyl or aryl group having 1 to 32 carbon atoms which may have substituents.

## 9.-12. (Cancelled)

- 13. (Currently Amended) A method of fluorination according to Claim 426, wherein the fluorinating agent is a compound represented by general formula (II) in which X represents fluorine atom.
- 14. (Currently Amended) A method of fluorination according to Claim 436, wherein the fluorinating agent is a compound represented by general formula (II) in which X represents fluorine atom, Y represents nitrogen atom, R<sup>0</sup> represents 3-methylphenyl group or 2-methoxyphenyl group, and R<sup>1</sup> and R<sup>2</sup> represent ethyl group.

21. (Currently amended) A method of fluorination according to Claim 484, wherein the fluorination is conducted in a presence of an agent accelerating a reaction.

24. (Previously Presented) A method of fluorination according to Claim 5, wherein the fluorinating agent is a compound represented by general formula (II):

$$R^0 - C - Y < R^1$$

(II)

Docket No. 396.45117X00 Serial No. 10/537,437

April 19, 2007

wherein Y represents nitrogen atom or phosphorus atom, X represents hydrogen atom or a halogen atom,  $R^0$ ,  $R^1$  and  $R^2$  represent hydrogen atom or an alkyl or aryl group which may have substituents, the atom and the groups represented by  $R^0$ ,  $R^1$  and  $R^2$  may be a same with or different from each other, and two or three of the

groups represented by R<sup>0</sup>, R<sup>1</sup> and R<sup>2</sup> may be bonded to each other to form a ring.

25. (New) The method of fluorination according to Claim 1, wherein the monosaccharide is selected from the group consisting of glucose, fucose, N-acetylglucosamine, N-acetylgalactosamine, N-acetylneuraminic acid, erythrose, threose, ribose, arabinose, xylose, arose, lyxose, altrose, mannose, gulose, idose, galactose, talose, psicose, furctose, sorbose, tagatose, hexaenose, apiose, and a deoxy sugar, an amino sugar, a thio sugar, a condensed sugar and an anhydride of the monosaccharide, and the monosaccharide bonded to a base of a nucleic acid is selected from the group consisting of a nucleoside, an oligonucleoside, ribonucleic acid and deoxyribonucleic acid.